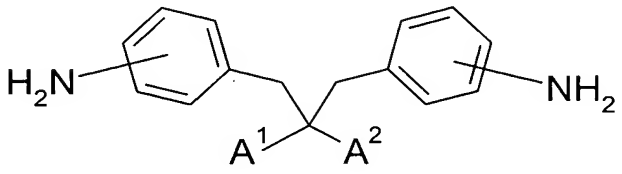
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): Diamine compounds represented by the general formula I:



I

wherein

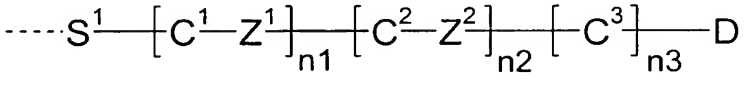
A^1 represents an organic group of 1 to 40 carbon atoms;

A^2 represents a hydrogen atom or an organic group of 1 to 40 carbon atoms.

2. (original): Diamine compounds according to claim 1, wherein A^1 and A^2 each independently represent a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or poly-substituted by fluorine or chlorine, having 1 to 40 carbon atoms, wherein one or more $-CH_2-$ groups may independently be replaced by a group B, with the proviso that oxygen atoms are not directly attached to each other, wherein B represents a group selected from -O-, -CO-, -CO-O-, -O-CO-, $-NR^1-$, $-NR^1-CO-$, $-CO-NR^1-$,

$-NR^1-CO-O-$, $-O-CO-NR^1-$, $-NR^1-CO-NR^1-$, $-CH=CH-$, $-C\equiv C-$, $-O-CO-O-$ and $-Si(CH_3)_2-O-Si(CH_3)_2-$ and wherein R^1 represents a hydrogen atom or lower alkyl.

3. (currently amended): Diamine compounds according to claims 1 ~~or 2~~, wherein A^1 and A^2 each independently preferably represent a mesogen group represented by general formula II:



II

wherein

C^1 to C^3 each independently represent an aromatic or an alicyclic group, which is unsubstituted or mono- or poly-substituted by a cyano group or by halogen atoms, or by a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, wherein one or more non-adjacent $-CH_2-$ groups may independently be replaced by a group B;

D represents a hydrogen atom, a halogen atom, a cyano group, or a straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or poly-substituted by fluorine, chlorine, having 1 to 24 carbon

atoms, wherein one or more non-adjacent -CH_2- groups may independently be replaced by a group B, or represents a organic group having a steroid skeleton;

S^1 represents a single bond or a spacer unit such a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by a cyano group or by halogen atoms, having 1 to 24 carbon atoms, wherein one or more non-adjacent -CH_2- groups may independently be replaced by a group B;

Z^1 , Z^2 each independently of the other represent a single bond or a spacer unit such a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by a cyano group or by halogen atoms, having 1 to 8 carbon atoms, wherein one or more non-adjacent -CH_2- groups may independently be replaced by a group B;

n_1 to n_3 are each independently 0 or 1; and

B is as defined above,

with the proviso that if n1 = n2 = n3 = 0 then D is a straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or poly-substituted by fluorine, chlorine, having 5 to 24 carbon atoms, wherein one or more non-

adjacent -CH_2- groups may independently be replaced by a group B, or represents a organic group having a steroid skeleton.

4. (original): Diamine compounds according to claim 3, wherein C^1 to C^3 are selected from pyrimidine-2,5-diyl, pyridine-2,5-diyl, 1,4- or 2,6-naphthylene, decahydronaphthalin-2,6-diyl, 1,2,3,4-tetrahydronaphtalin-2,6-diyl, cyclohexane-1,4-diyl and 1,4-phenylene, which is unsubstituted or substituted by a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine having from 1 to 12 carbon atoms in which optionally one or more non-adjacent -CH_2- groups are replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH- and -C≡C-.

5. (currently amended): Diamine compounds according to claim 3 ~~or 4~~, wherein C^1 to C^3 are selected from cyclohexane-1,4-diyl and 1,4-phenylene, which is unsubstituted or substituted by a cyclic, straight-chain or branched alkyl residue having 1 to 12 carbon atoms in which optionally one or more non-adjacent -CH_2- groups are replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH- and -C≡C-.

6. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to 5~~, wherein D is a hydrogen atom, a fluoro atom, a chloro atom, a cyano group or a straight-chain or branched alkyl residue which is unsubstituted, mono-substituted by cyano or fluorine, chlorine, or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, wherein one or more non-adjacent-CH_2- groups may independently be replaced by -O-, -CO-, -CO-O-, -O-CO-,

$-NR^1-CO-$, $-CO-NR^1-$, $-NR^1-CO-O-$, $-O-CO-NR^1-$, -CH=CH-, -C≡C- and -O-CO-O-, wherein R^1 represents a hydrogen atom or lower alkyl, or represents an organic group having a steroid skeleton.

7. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to 6~~, wherein D is a hydrogen atom, a fluoro atom, a chloro atom, a cyano group or a straight-chain or branched alkyl residue, having 1 to 12 carbon atoms, wherein one or more non-adjacent $-CH_2-$ groups may independently be replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH-, -C≡C- and -O-CO-O-.

8. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to 7~~, wherein S^1 is selected from a single covalent bond, $-CO-O-$, $-CO-NR^1-$, -CO- and a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by fluorine, chlorine and cyano, having 1 to 24 carbon atoms, wherein one or more non-adjacent $-CH_2-$ groups may independently be replaced by a group B, wherein R^1 represents a hydrogen atom or lower alkyl.

9. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to 8~~, wherein S^1 is selected from a single covalent bond, $-CO-O-$, -CO-, $-(CH_2)_r-$, $-(CH_2)_r-O-$, $-(CH_2)_r-CO-$, $-(CH_2)_r-CO-O-$, $-(CH_2)_r-O-CO-$, $-(CH_2)_r-CO-NR^1-$, $-(CH_2)_r-NR^1-CO-$, $-(CH_2)_r-NR^1-$, $-CO-O-(CH_2)_r-$, $-CO-NR^1-(CH_2)_r-$, $-CO-O-(CH_2)_r-O-$, $-CO-NR^1-(CH_2)_r-O-$, $-CO-NR^1-(CH_2)_r-NR^1-$, $-CO-NR^1-(CH_2)_r-O-CO-$, $-(CH_2)_r-O-(CH_2)_s-$, $-(CH_2)_r-CO-O-(CH_2)_s-$,

$-(CH_2)_r-O-CO-(CH_2)_s-$, $-(CH_2)_r-NR^1-CO-(CH_2)_s-$, $-(CH_2)_r-NR^1-CO-O-(CH_2)_s-$, $-(CH_2)_r-O-(CH_2)_s-O-$, $-(CH_2)_r-CO-O-(CH_2)_s-O-$, $-(CH_2)_r-O-CO-(CH_2)_s-O-$, $-(CH_2)_r-NR^1-CO-(CH_2)_s-O-$, $-(CH_2)_r-NR^1-CO-O-(CH_2)_s-O-$, $-CO-O-(CH_2)_r-O-(CH_2)_s-$ and $-CO-O(CH_2)_r-O-(CH_2)_s-O-$, wherein R^1 is as defined above, r and s each represent an integer from 1 to 20, preferably from 1 to 12, and $r + s \leq 21$, preferably ≤ 15.

10. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to 9~~, wherein S^1 is selected from a single covalent bond, $-(CH_2)_r-$, $-(CH_2)_r-O-$, $-(CH_2)_r-CO-O-$, $-(CH_2)_r-O-CO-$, $-(CH_2)_r-CO-NH-$, $-(CH_2)_r-NH-CO-$, $-CO-O-(CH_2)_r-$, $-CO-NH-(CH_2)_r-$, $-CO-O-(CH_2)_r-O-$, $-CO-NH-(CH_2)_r-O-$, $-(CH_2)_r-NH-CO-(CH_2)_s-$, $-(CH_2)_r-NH-CO-O-(CH_2)_s-$, $-(CH_2)_r-O-(CH_2)_s-O-$, $-(CH_2)_r-NH-CO-(CH_2)_s-O-$, $-(CH_2)_r-NHCO-O-(CH_2)_s-O-$, $-CO-O-(CH_2)_r-O-(CH_2)_s-O-$, and $-CO-(CH_2)_r-NH-CO-(CH_2)_s-O-$, wherein r and s each represent an integer from 1 to 12 and $r + s \leq 15$.

11. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to 10~~, wherein S^1 include 1,2-ethylene, 1,3-propylene, 1,4-butylene, 1,5-pentylene, 1,6-hexylene, 1,7-heptylene, 1,8-octylene, 1,9-nonylene, 1,10-decylene, 1,11-undecylene, 1,12-dodecylene, 3-methyl-1,4-butylene, 2-(methylenoxy)ethylene, 3-(methylenoxy)propylene, 4-(methylenoxy)butylene, 5-(methylenoxy)pentylene, 6-(methylenoxy)hexylene, 7-(methylenoxy)heptylene, 8-(methylenoxy)octylene, 9-(methylenoxy)nonylene, 10-(methylenoxy)decylene, 11-(methylenoxy)undecylene, 12-(methylenoxy)dodecylene, 2-(carbonyloxy)ethylene, 3-(carbonyloxy)propylene,

4-(carbonyloxy)butylene, 5-(carbonyloxy)pentylene, 6-(carbonyloxy)hexylene, 7-(carbonyloxy)heptylene, 8-(carbonyloxy)octylene, 9-(carbonyloxy)nonylene, 10-(carbonyloxy)decylene, 11-(carbonyloxy)undecylene, 12-(carbonyloxy)dodecylene, 2-(carbonylamino)ethylene, 3-(carbonylamino)propylene, 4-(carbonylamino)butylene, 5-(carbonylamino)pentylene, 6-(carbonylamino)hexylene, 7-(carbonylamino)heptylene, 8-(carbonylamino)octylene, 9-(carbonylamino)nonylene, 10-(carbonylamino)decylene, 11-(carbonylamino)undecylene, 12-(carbonylamino)dodecylene, 3-propyleneoxy, 3-propyleneoxycarbonyl, 2-ethylenoyloxy, 4-butyleneoxy, 4-butyleneoxycarbonyl, 3-propylenoyloxy, 5-pentyleneoxy, 5-pentyleneoxycarbonyl, 4-butylenoyloxy, 6-hexyleneoxy, 6-hexyleneoxycarbonyl, 5-pentylenoyloxy, 7-heptyleneoxy, 7-heptyleneoxycarbonyl, 6-hexylenoyloxy, 8-octyleneoxy, 8-octyleneoxycarbonyl, 7-heptylenoyloxy, 9-nonyleneoxy, 9-nonyleneoxycarbonyl, 8-octylenoyloxy, 10-decyleneoxy, 10-decyleneoxycarbonyl, 9-nonylenoyloxy, 11-undecyleneoxy, 11-undecyleneoxycarbonyl, 10-decylenoyloxy, 12-dodecyleneoxy, 12-dodecyleneoxycarbonyl, 11-undecylenoyloxy, 3-propyleneaminocarbonyl, 4-butyleneaminocarbonyl, 5-pentyleneaminocarbonyl, 6-hexyleneaminocarbonyl, 7-heptyleneaminocarbonyl, 8-octyleneaminocarbonyl, 9-nonyleneaminocarbonyl, 10-decyleneaminocarbonyl, 11-undecyleneaminocarbonyl, 12-dodecyleneaminocarbonyl, 2-ethylenecarbonylamino, 3-propylenecarbonylamino, 4-butylenecarbonylamino, 5-pentylenecarbonylamino, 6-hexylenecarbonylamino, 7-heptylenecarbonylamino, 8-octylenecarbonylamino, 9-nonylenecarbonylamino, 10-decylenecarbonylamino, 11-undecylenecarbonylamino, 2-(methylenoxy)ethanoyloxy, 3-(methylenoxy)propyloxy, 3-(methylenoxy)propyloxycarbonyl, 4-(methylenoxy)butyloxy,

4-(methylenoxy)butyloxycarbonyl, 3-(methylenoxy)propanoyloxy,

5-(methylenoxy)pentyloxy, 5-(methylenoxy)pentyloxycarbonyl,

4-(methylenoxy)butanoyloxy, 6-(methylenoxy)hexyloxy,

6-(methylenoxy)hexyloxycarbonyl, 5-(methylenoxy)pentanoyloxy,

7-(methylenoxy)heptyloxy, 7-(methylenoxy)heptyloxycarbonyl,

6-(methylenoxy)hexanoyloxy, 8-(methylenoxy)octyloxy,

8-(methylenoxy)octyloxycarbonyl, 7-(methylenoxy)heptanoyloxy,

9-(methylenoxy)nonyloxy, 9-(methylenoxy)nonyloxycarbonyl,

8-(methylenoxy)octanoyloxy, 10-(methylenoxy)decyloxy,

10-(methylenoxy)decyloxycarbonyl, 9-(methylenoxy)nonanoyloxy,

11-(methylenoxy)undecyloxy, 11-(methylenoxy)undecyloxycarbonyl,

10-(methylenoxy)decanoyloxy, 12-(methylenoxy)dodecyloxy,

12-(methylenoxy)dodecyloxycarbonyl, 11-(methylenoxy)undecanoyloxy,

3-(methylenoxy)propylaminocarbonyl, 4-(methylenoxy)butylaminocarbonyl,

5-(methylenoxy)pentylaminocarbonyl, 6-(methylenoxy)hexylaminocarbonyl,

7-(methylenoxy)heptylaminocarbonyl, 8-(methylenoxy)octylaminocarbonyl,

9-(methylenoxy)nonylaminocarbonyl, 10-(methylenoxy)decylaminocarbonyl,

11-(methylenoxy)undecylaminocarbonyl, 12-(methylenoxy)dodecylaminocarbonyl,

2-(methylenoxy)ethanoylamino, 3-(methylenoxy)propanoylamino,

4-(methylenoxy)butanoylamino, 5-(methylenoxy)pentanoylamino,

6-(methylenoxy)hexanoylamino, 7-(methylenoxy)heptanoylamino,

8-(methylenoxy)octanoylamino, 9-(methylenoxy)nonanoylamino,

10-(methylenoxy)decanoylamino, 11-(methylenoxy)undecanoylamino, 12-

(methylenoxy)dodecylaminocarbonyl, 2-(carbonyloxy)ethanoyloxy,

3-(carbonyloxy)propyloxy, 3-(carbonyloxy)propyloxycarbonyl,

4-(carbonyloxy)butyloxy, 4-(carbonyloxy)butyloxycarbonyl,

3-(carbonyloxy)propanoyloxy, 5-(carbonyloxy)pentyloxy,

5-(carbonyloxy)pentyloxycarbonyl, 4-(carbonyloxy)butanoyloxy,

6-(carbonyloxy)hexyloxy, 6-(carbonyloxy)hexyloxycarbonyl,

5-(carbonyloxy)pentanoyloxy, 7-(carbonyloxy)heptyloxy,

7-(carbonyloxy)heptyloxycarbonyl, 6-(carbonyloxy)hexanoyloxy,

8-(carbonyloxy)octyloxy, 8-(carbonyloxy)octyloxycarbonyl,

7-(carbonyloxy)heptanoyloxy, 9-(carbonyloxy)nonyloxy,

9-(carbonyloxy)nonyloxycarbonyl, 8-(carbonyloxy)octanoyloxy,

10-(carbonyloxy)decyloxy, 10-(carbonyloxy)decyloxycarbonyl,

9-(carbonyloxy)nonanoyloxy, 11-(carbonyloxy)undecyloxy,

11-(carbonyloxy)undecyloxycarbonyl, 10-(carbonyloxy)decanoyloxy,

12-(carbonyloxy)dodecyloxy, 12-(carbonyloxy)dodecyloxycarbonyl,

11-(carbonyloxy)undecanoyloxy, 3-(carbonyloxy)propylaminocarbonyl,

4-(carbonyloxy)butylaminocarbonyl, 5-(carbonyloxy)pentylaminocarbonyl,

6-(carbonyloxy)hexylaminocarbonyl, 7-(carbonyloxy)heptylaminocarbonyl,

8-(carbonyloxy)octylaminocarbonyl, 9-(carbonyloxy)nonylaminocarbonyl,

10-(carbonyloxy)decylaminocarbonyl, 11-(carbonyloxy)undecylaminocarbonyl,

12-(carbonyloxy)dodecylaminocarbonyl, 2-(carbonyloxy)ethanoylamino,

3-(carbonyloxy)propanoylamino, 4-(carbonyloxy)butanoylamino,

5-(carbonyloxy)pentanoylamino, 6-(carbonyloxy)hexanoylamino,

7-(carbonyloxy)heptanoylamino, 8-(carbonyloxy)octanoylamino,

9-(carbonyloxy)nonanoylamino, 10-(carbonyloxy)decanoylamino,

11-(carbonyloxy)undecanoylamino, 12-(carbonyloxy)dodecylaminocarbonyl

6-(3-propyleneaminocarbonyloxy)hexylene, 6-(3-propyleneoxy)hexylene,

6-(3-propyleneoxy)hexyloxy, 6-(3-propyleneaminocarbonyloxy)hexyloxy,

6-(3-propyleneaminocarbonyl)hexyl, 6-(3-propyleneaminocarbonyl)hexyloxy,

2-(1-methyleneoxy)ethyloxycarbonyloxy, 3-(1-methyleneoxy)propyloxycarbonyloxy,

6-(1-methyleneoxy)hexyloxycarbonyloxy, 2-(1-methyleneoxycarbonyl)ethylene,

3-(1-methyleneoxycarbonyl)propyloxycarbonyloxy,

6-(1-methyleneoxycarbonyl)hexyloxycarbonyloxy,

6-(3-propyleneoxycarbonyloxy)hexylene, 6-(3-propyleneoxycarbonyl)hexylene,

2-(1-methyleneaminocarbonyl)ethylene, 3-(1-methyleneaminocarbonyl)propylene,

6-(1-methyleneaminocarbonyl)hexylene, 6-(3-propyleneaminocarbonyloxy)hexylene,

6-(3-propyleneaminocarbonyl)hexylene and the like.

12. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to 11~~, wherein Z^1 and Z^2 are selected form a single covalent bond or a spacer unit such as a straight-chain or branched alkylene group, which is unsubstituted, mono or poly-substituted by fluoro atoms, having 1 to 8 carbon atoms, wherein one or more non-adjacent $-CH_2-$ groups may independently be replaced by a group selected from -O-, -CO-, -CO-O-, -O-CO-, $-NR^1-CO-$, $-CO-NR^1-$, -CH=CH-, -C≡C-, and wherein R^1 represents a hydrogen atom or lower alkyl.

13. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to 12~~, wherein Z^1 and Z^2 are selected form a single covalent bond or a spacer unit such a straight-chain or branched alkylene group having 1 to 4 carbon atoms, wherein one or two non-adjacent $-CH_2-$ groups may independently be replaced by a group selected from -O-, -CO-, -CO-O-, -O-CO-.

14. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to 13~~, wherein n2 = 1 and n3 = 1.

15. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to 14~~, wherein n1 = 0 with n2 = 1 and n3 = 1.

16. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to 15~~, wherein D is an organic group having a steroid skeleton if n1+n2+n3 = 0.

17. (currently amended): Diamine compounds according to ~~anyone of~~ claims 3 ~~to 16~~, wherein the steroid skeleton is a 3-cholesteryl or a 3-cholestanyl residue.

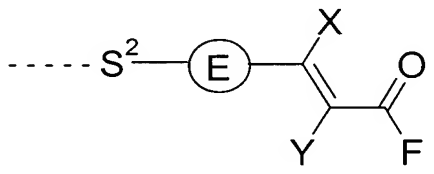
18. (currently amended): Diamine compounds according to ~~any preceding~~ claim 1, wherein A^1 and A^2 each independently preferably represent a photoreactive group which can be photoisomerized and/or photodimerized on exposure to UV or laser light.

19. (original): Diamine compounds according to claim 18, wherein the photoreactive groups are able to undergo photocyclization, in particular [2+2]-photocyclization.

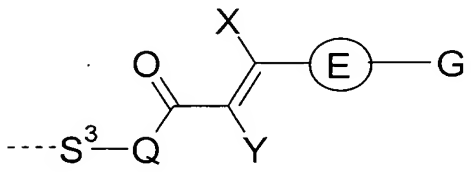
20. (currently amended): Diamine compounds according to claims ~~18 or 19~~, wherein the photoreactive groups are sensitive to UV or laser light, in particular linearly polarized UV light.

21. Diamine compounds according to ~~anyone of~~ claims 18 ~~to 20~~, wherein the photoreactive groups include cinnamates, benzylidenephthalimidines, benzylideneacetophones, diphenylacetylenes stilbazoles, uracyl, quinolinone, maleinimides, or cinnamylidene acetic acid derivatives, particularly preferred groups are cinnamates, coumarins, benzylideneacetophenones, or maleinimides.

22. (currently amended): Diamine compounds according to ~~anyone of~~ claims 18 ~~to 21~~, wherein the photoreactive groups are represented by general formulae IIIa and IIIb:



IIIa



IIIb

wherein

E represents pyrimidine-2,5-diyl, pyridine-2,5-diyl, 2,5-thiophenylene, 2,5-furanylene, 1,4- or 2,6-naphthylene, or phenylene, which is unsubstituted or mono- or poly-substituted by fluorine, chlorine or by a cyclic, straight-chain or branched alkyl residue which is unsubstituted mono- or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, wherein one or more non-adjacent $-CH_2-$ groups may independently be replaced by a group B as defined hereinabove;

F represents $-OR^2$, $-NR^3R^4$ or an oxygen atom, which defines together with the ring E a coumarin unit, wherein R^2, R^3 and R^4 are selected from hydrogen, a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine, having 1 to 24 carbon atoms, wherein one or more non-adjacent $-CH_2-$ groups may independently be replaced by a group J, or R^3 and R^4 together form a C_{5-8} alicyclic ring; wherein

J represents a group selected from -O-, -CO-, -CO-O-, -O-CO-, $-NR^1-$, $-NR^1-CO-$, $-CO-NR^1-$, $-NR^1-CO-O-$, $-O-CO-NR^1-$, $-NR^1-CO-NR^1-$, -CH=CH-, -C≡C-, -O-CO-O- and $-Si(CH_3)_2-O-Si(CH_3)_2-$, an aromatic or an alicyclic group, and wherein R^1 represents a hydrogen atom or lower alkyl;

G represents a hydrogen atom, or a halogen atom, or a straight-chain or branched alkyl group which is unsubstituted, mono or poly-substituted by cyano, fluorine,

chlorine, having 1 to 24 carbon atoms, wherein one or more $-CH_2-$ groups may independently be replaced by a group J, with the proviso that oxygen atoms are not directly attached to each other;

S^2 , S^3 each independently of the other represent a single bond or a spacer unit such as a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by fluorine, chlorine,or cyano, having 1 to 40 carbon atoms, wherein one or more $-CH_2-$ groups may independently be replaced by a group J, with the proviso that oxygen atoms are not directly attached to each other;

Q represents an oxygen atom or $-NR^1-$ wherein R^1 represents a hydrogen atom or lower alkyl;

X, Y each independently of the other represents hydrogen, fluorine, chlorine, cyano, alkyl optionally substituted by fluorine having 1 to 12 carbon atoms in which optionally one or more non-adjacent alkyl $-CH_2-$ groups are replaced by -O-, -CO-O-, -O-CO- and/or -CH=CH-.

23. (original): Diamine compounds according to claim 22, wherein E is selected from pyrimidine-2,5-diyl, pyridine-2,5-diyl, 2,5-thiophenylene, 2,5-furanylene, 1,4- or 2,6-naphthylene and phenylene, which is unsubstituted or substituted by a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly-substituted by fluorine, chlorine

having 1 to 12 carbon atoms in which optionally one or more non-adjacent alkyl $-CH_2-$ groups are replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH- and -C≡C-.

24. (currently amended): Diamine compounds according to claims 22 ~~or 23~~, wherein E is selected from 2,5-furanylene, 1,4- or 2,6-naphthylene and phenylene, which is unsubstituted or substituted by a cyclic, straight-chain or branched alkyl residue having 1 to 12 carbon atoms in which optionally one or more non-adjacent alkyl $-CH_2-$ groups are replaced by -O-, -CO-, -CO-O-, -O-CO-, -CH=CH- and -C≡C-.

25. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 ~~to~~ ~~24~~, wherein F is selected from $-OR^2$ and $-NR^3R^4$, wherein R^2 and R^3 represent a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly- substituted by fluorine, chlorine, cyano, having 1 to 18 carbons atoms, wherein one or more non-adjacent alkyl $-CH_2-$ groups may independently be replaced by -O- or -CH=CH-, wherein R^4 is selected from a hydrogen atom or a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or poly- substituted by fluorine, chlorine, cyano, having 1 to 18 carbons atoms, wherein one or more non-adjacent $-CH_2-$ groups may independently be replaced by -O- or -CH=CH-, or R^4 and R^5 together to form a C_{5-8} alicyclic ring.

26. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 ~~to~~ ~~26~~, wherein F is selected from the group comprising $-OR^2$ or $-NHR^3$, wherein R^2 and R^3 represent a cyclic, straight-chain or branched alkyl residue which is unsubstituted, mono- or

poly- substituted by fluorine atoms, having 1 to 18 carbon atoms, wherein one or more non-adjacent -CH_2- groups may independently be replaced by -O-.

27. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 ~~to~~ ~~26~~, wherein G is a hydrogen atom, or fluorine atom, or chlorine atom, or a straight-chain or branched alkyl group which is unsubstituted, mono-substituted by cyano, fluorine or chlorine or poly-substituted by fluorine, chlorine, having 1 to 18 carbon atoms, wherein one or more -CH_2- groups may independently be replaced -O-, -CO-, -CO-O-, -O-CO-, -NR^1-, -NR^1-CO-, -CO-NR^1-, -NR^1-CO-O-, -O-CO-NR^1-, -NR^1-CO-NR^1-, -CH=CH-, -C≡C- and -O-CO-O-, an aromatic or an alicyclic group, with the proviso that oxygen atoms are not directly attached to each other, and wherein R^1 represents a hydrogen atom or lower alkyl.

28. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 ~~to~~ ~~27~~, wherein G is a hydrogen atom, or a straight-chain or branched alkyl group having 1 to 18 carbon atoms, wherein one or more non-adjacent -CH_2- groups may independently be replaced -O-, -CO-, -CO-O-, -O-CO-, -NR^1-, -NR^1-CO-, -CO-NR^1-, and -O-CO-O-, with the proviso that oxygen atoms are not directly attached to each other, and wherein R^1 represents a hydrogen atom or lower alkyl.

29. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22-~~to~~ ~~28~~, wherein S^2 is selected from a single covalent bond, -CO-O-, -CO-NR^1-, -CO- and a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by

fluorine, chlorine,or cyano, having 1 to 24 carbon atoms, wherein one or more $-CH_2-$ groups may independently be replaced by a group J, with the proviso that oxygen atoms are not directly attached to each other, wherein R^1 represents a hydrogen atom or lower alkyl.

30. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 ~~to~~ ~~29~~, wherein S^2 is selected from a single covalent bond, -CO-O-, -CO-, $-(CH_2)_r-$, $-(CH_2)_r-O-$, $-(CH_2)_r-CO-$, $-(CH_2)_r-CO-O-$, $-(CH_2)_r-O-CO-$, $-(CH_2)_r-CO-NR^1-$, $-CO-O-(CH_2)_r-O-$, $-(CH_2)_r-NR^1-CO-$, $-(CH_2)_r-NR^1-$, $-CO-O-(CH_2)_r-$, $-CO-NR^1-(CH_2)_r-$, $-CO-NR^1-(CH_2)_r-O-$, $-CO-NR^1-(CH_2)_r-NR^1-$, $-CO-NR^1-(CH_2)_r-O-CO-$, $-(CH_2)_r-O-(CH_2)_s-$, $-(CH_2)_r-CO-O-(CH_2)_s-$, $-(CH_2)_r-O-CO-(CH_2)_s-$, $-(CH_2)_r-NR^1-CO-(CH_2)_s-$, $-(CH_2)_r-NR^1-CO-O-(CH_2)_s-$, $-(CH_2)_r-O-(CH_2)_s-O-$, $-(CH_2)_r-CO-O-(CH_2)_s-O-$, $-(CH_2)_r-O-CO-(CH_2)_s-O-$, $-(CH_2)_r-NR^1-CO-(CH_2)_s-O-$, $-(CH_2)_r-NR^1-CO-O-(CH_2)_s-O-$, $-CO-O-(CH_2)_r-O-(CH_2)_s-$ and $-CO-O-(CH_2)_r-O-(CH_2)_s-O-$, wherein R^1 is as defined above, r and s each represent an integer from 1 to 20, preferably from 1 to 12, and $r + s \leq 21$, preferably ≤ 15.

31. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 ~~to~~ ~~30~~, wherein S^2 is selected from a single covalent bond, $-(CH_2)_r-$, $-(CH_2)_r-O-$, $-(CH_2)_r-CO-O-$, $-(CH_2)_r-O-CO-$, $-(CH_2)_r-CO-NH-$, $-(CH_2)_r-NH-CO-$, $-CO-O-(CH_2)_r-$, $-CO-NH-(CH_2)_r-$, $-CO-O-(CH_2)_r-O-$, $-CO-NH-(CH_2)_r-O-$, $-(CH_2)_r-NH-CO-(CH_2)_s-$, $-(CH_2)_r-NH-CO-O-(CH_2)_s-$, $-(CH_2)_r-O-(CH_2)_s-O-$, $-(CH_2)_r-NH-CO-(CH_2)_s-O-$, $-(CH_2)_r-NH-CO-O-(CH_2)_s-O-$,

-CO-O-$(CH_2)_r$-O-$(CH_2)_s$-O-, and -CO-$(CH_2)_r$-NH-CO-$(CH_2)_s$-O-, wherein r and s each represent an integer from 1 to 12 and $r + s \leq 15$.

32. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 ~~to~~ ~~31~~, wherein S^2 include 1,2-ethylen, 1,3-propylen, 1,4-butylen, 1,5-pentylen, 1,6-hexylen, 1,7-heptylen, 1,8-octylen, 1,9-nonylen, 1,10-decylen, 1,11-undecylen, 1,12-dodecylen, 3-methyl-1,4-butylen, 2-(methylenoxy)ethylen, 3-(methylenoxy)propylen, 4-(methylenoxy)butylen, 5-(methylenoxy)pentylen, 6-(methylenoxy)hexylen, 7-(methylenoxy)heptylen, 8-(methylenoxy)octylen, 9-(methylenoxy)nonylen, 10-(methylenoxy)decylen, 11-(methylenoxy)undecylen, 12-(methylenoxy)dodecylen, 2-(carbonyloxy)ethylen, 3-(carbonyloxy)propylen, 4-(carbonyloxy)butylen, 5-(carbonyloxy)pentylen, 6-(carbonyloxy)hexylen, 7-(carbonyloxy)heptylen, 8-(carbonyloxy)octylen, 9-(carbonyloxy)nonylen, 10-(carbonyloxy)decylen, 11-(carbonyloxy)undecylen, 12-(carbonyloxy)dodecylen, 2-(carbonylamino)ethylen, 3-(carbonylamino)propylen, 4-(carbonylamino)butylen, 5-(carbonylamino)pentylen, 6-(carbonylamino)hexylen, 7-(carbonylamino)heptylen, 8-(carbonylamino)octylen, 9-(carbonylamino)nonylen, 10-(carbonylamino)decylen, 11-(carbonylamino)undecylen, 12-(carbonylamino)dodecylen, 3-propylenoxy, 3-propylenoxycarbonyl, 2-ethylenoyloxy, 4-butylenoxy, 4-butylenoxycarbonyl, 3-propylenoyloxy, 5-pentylenoxy, 5-pentylenoxycarbonyl, 4-butylenoyloxy, 6-hexylenoxy, 6-hexylenoxycarbonyl, 5-pentylenoyloxy, 7-heptylenoxy, 7-heptylenoxycarbonyl, 6-hexylenoyloxy, 8-octylenoxy, 8-octylenoxycarbonyl, 7-heptylenoyloxy, 9-nonylenoxy, 9-nonylenoxycarbonyl, 8-octylenoyloxy, 10-decylenoxy, 10-decylenoxycarbonyl, 9-nonylenoyloxy, 11-undecylenoxy, 11-undecylenoxycarbonyl,

10-decylenoyloxy, 12-dodecylenoxy, 12-dodecylenoxycarbonyl, 11-undecylenoyloxy,

3-propylenaminocarbonyl, 4-butylenaminocarbonyl, 5-pentylenaminocarbonyl,

6-hexylenaminocarbonyl, 7-heptylenaminocarbonyl, 8-octylenaminocarbonyl,

9-nonylenaminocarbonyl, 10-decylenaminocarbonyl, 11-undecylenaminocarbonyl,

12-dodecylenaminocarbonyl, 2-ethylenoylamino, 3-propylenoylamino, 4-butylenoylamino,

5-pentylenoylamino, 6-hexylenoylamino, 7-heptylenoylamino, 8-octylenoylamino,

9-nonylenoylamino, 10-decylenoylamino, 11-undecylenoylamino, 2-(methylenoxy)ethanoyloxy ,

3-(methylenoxy)propyloxy, 3-(methylenoxy)propyloxycarbonyl, 4-(methylenoxy)butyloxy,

4-(methylenoxy)butyloxycarbonyl, 3-(methylenoxy)propanoyloxy, 5-(methylenoxy)pentyloxy,

5-(methylenoxy)pentyloxycarbonyl, 4-(methylenoxy)butanoyloxy, 6-(methylenoxy)hexyloxy,

6-(methylenoxy)hexyloxycarbonyl, 5-(methylenoxy)pentanoyloxy, 7-(methylenoxy)heptyloxy,

7-(methylenoxy)heptyloxycarbonyl, 6-(methylenoxy)hexanoyloxy, 8-(methylenoxy)octyloxy,

8-(methylenoxy)octyloxycarbonyl, 7-(methylenoxy)heptanoyloxy, 9-(methylenoxy)nonyloxy,

9-(methylenoxy)nonyloxycarbonyl, 8-(methylenoxy)octanoyloxy, 10-(methylenoxy)decyloxy,

10-(methylenoxy)decyloxycarbonyl, 9-(methylenoxy)nonanoyloxy,

11-(methylenoxy)undecyloxy, 11-(methylenoxy)undecyloxycarbonyl,

10-(methylenoxy)decanoyloxy, 12-(methylenoxy)dodecyloxy,

12-(methylenoxy)dodecyloxycarbonyl, 11-(methylenoxy)undecanoyloxy,

3-(methylenoxy)propylaminocarbonyl, 4-(methylenoxy)butylaminocarbonyl,

5-(methylenoxy)pentylaminocarbonyl, 6-(methylenoxy)hexylaminocarbonyl,

7-(methylenoxy)heptylaminocarbonyl, 8-(methylenoxy)octylaminocarbonyl,

9-(methylenoxy)nonylaminocarbonyl, 10-(methylenoxy)decylaminocarbonyl,

11-(methylenoxy)undecylaminocarbonyl, 12-(methylenoxy)dodecylaminocarbonyl,

2-(methylenoxy)ethanoylamino, 3-(methylenoxy)propanoylamino,

4-(methylenoxy)butanoylamino, 5-(methylenoxy)pentanoylamino,

6-(methylenoxy)hexanoylamino, 7-(methylenoxy)heptanoylamino,

8-(methylenoxy)octanoylamino, 9-(methylenoxy)nonanoylamino,

10-(methylenoxy)decanoylamino, 11-(methylenoxy)undecanoylamino, 12-

(methylenoxy)dodecylaminocarbonyl, 2-(carbonyloxy)ethanoyloxy, 3-(carbonyloxy)propyloxy,

3-(carbonyloxy)propyloxycarbonyl, 4-(carbonyloxy)butyloxy, 4-(carbonyloxy)butyloxycarbonyl,

3-(carbonyloxy)propanoyloxy, 5-(carbonyloxy)pentyloxy, 5-(carbonyloxy)pentyloxycarbonyl,

4-(carbonyloxy)butanoyloxy, 6-(carbonyloxy)hexyloxy, 6-(carbonyloxy)hexyloxycarbonyl,

5-(carbonyloxy)pentanoyloxy, 7-(carbonyloxy)heptyloxy, 7-(carbonyloxy)heptyloxycarbonyl,

6-(carbonyloxy)hexanoyloxy, 8-(carbonyloxy)octyloxy, 8-(carbonyloxy)octyloxycarbonyl,

7-(carbonyloxy)heptanoyloxy, 9-(carbonyloxy)nonyloxy, 9-(carbonyloxy)nonyloxycarbonyl,

8-(carbonyloxy)octanoyloxy, 10-(carbonyloxy)decyloxy, 10-(carbonyloxy)decyloxycarbonyl,

9-(carbonyloxy)nonanoyloxy, 11-(carbonyloxy)undecyloxy,

11-(carbonyloxy)undecyloxycarbonyl, 10-(carbonyloxy)decanoyloxy,

12-(carbonyloxy)dodecyloxy, 12-(carbonyloxy)dodecyloxycarbonyl,

11-(carbonyloxy)undecanoyloxy, 3-(carbonyloxy)propylaminocarbonyl,

4-(carbonyloxy)butylaminocarbonyl, 5-(carbonyloxy)pentylaminocarbonyl,

6-(carbonyloxy)hexylaminocarbonyl, 7-(carbonyloxy)heptylaminocarbonyl,

8-(carbonyloxy)octylaminocarbonyl, 9-(carbonyloxy)nonylaminocarbonyl,

10-(carbonyloxy)decylaminocarbonyl, 11-(carbonyloxy)undecylaminocarbonyl,

12-(carbonyloxy)dodecylaminocarbonyl, 2-(carbonyloxy)ethanoylamino,

3-(carbonyloxy)propanoylamino, 4-(carbonyloxy)butanoylamino,

5-(carbonyloxy)pentanoylamino, 6-(carbonyloxy)hexanoylamino,

7-(carbonyloxy)heptanoylamino, 8-(carbonyloxy)octanoylamino,

9-(carbonyloxy)nonanoylamino, 10-(carbonyloxy)decanoylamino,

11-(carbonyloxy)undecanoylamino, 12-(carbonyloxy)dodecylaminocarbonyl,

6-(3-propylenaminocarbonyloxy)hexylen, 6-(3-propylenoxy)hexylen,

6-(3-propylenoxy)hexyloxy, 6-(3-propylenaminocarbonyloxy)hexyloxy,

6-(3-propylenaminocarbonyl)hexyl, 6-(3-propylenaminocarbonyl)hexyloxy,

2-(methylenoxy)ethyloxycarbonyloxy, 3-(methylenoxy)propyloxycarbonyloxy,

6-(methylenoxy)hexyloxycarbonyloxy, 2-(methylenoxycarbonyl)ethylen,

3-(methylenoxycarbonyl)propyloxycarbonyloxy,

6-(methylenoxycarbonyl)hexyloxycarbonyloxy, 6-(3-propylenoxycarbonyloxy)hexylen,

6-(3-propylenoxycarbonyl)hexylen, 2-(methylenaminocarbonyl)ethylen,

3-(methylenaminocarbonyl)propylen, 6-(methylenaminocarbonyl)hexylen,

6-(3-propylenaminocarbonyloxy)hexylen, 6-(3-propylenaminocarbonyl)hexylen,

4-{[6-(methylenoxy)hexyl]oxy}phenylen, 4-[6-(methylenoxy)hexyl]cyclohexylen,

3-methoxy-4-{[6-(methylenoxy)hexyl]oxy}phenylen,

4-{[6-(methylenoxy)hexyl]oxy}phenylcarbonyloxy,

4-[6-(methylenoxy)hexyl]cyclohexanoyloxy,

3-ethoxy-4-{[8-(methylenoxy)octyl]oxy}phenylcarbonyloxy,

4-[3-(carbonyloxy)propyl]phenylen, 4-[6-(carbonyloxy)hexyl]phenylen,

4-[6-(carbonyloxy)hexyl]cyclohexylen, 3-methoxy-4-[6-(carbonyloxy)hexyl]phenylen,

4-[6-(carbonyloxy)hexyl]phenylcarbonyloxy, 4-[6-(carbonyloxy)hexyl]cyclohexanoyloxy,

3-ethoxy-4-[8-(carbonyloxy)octyl]phenylcarbonyloxy,

2-{4-4-{2-(methylenoxy)ethyl}cyclohexyl]phenyl}ethoxy, 1-[4'-{[4-(methylenoxy)butyl]oxy}-1,1'biphenyl-4-yl]carbonyloxy, 1-{4-[4-{2-(methylenoxy)ethoxy}phenyl}methyloxy, 2-{4-[4-(2-carbonyloxyethyl) cyclohexyl]phenyl}ethoxy, 2-[4'-(4-carbonyloxybutyl)-1,1'biphenylen-4-yl]ethoxy, 6-{4-[4-(2-carbonyloxyethyl)phenyl}hexyloxy, 5-{[4'-[4-(methylenoxy)butoxy)]-1,1'-biphenyl-4-yl]oxy}pentanoyloxy and the like.

33. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 ~~to~~ ~~32~~, S^3 is selected from -CO-O-, -CO-NR^1-, -CO- and a straight-chain or branched alkylene group which is unsubstituted, mono or poly-substituted by fluorine, chlorine,or cyano, having 1 to 24 carbon atoms, wherein one or more -CH_2- groups may independently be replaced by a group J, with the proviso that oxygen atoms are not directly attached to each other, wherein R^1 represents a hydrogen atom or lower alkyl.

34. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22~~to~~ ~~33~~, wherein S^3 is selected from a single covalent bond, -$(CH_2)_r$-, -CO-$(CH_2)_r$-, -CO -O -$(CH_2)_r$-, -CO -NR^1 -$(CH_2)_r$-, -$(CH_2)_r$-O-$(CH_2)_s$-, -$(CH_2)_r$-CO-O-$(CH_2)_s$-, -$(CH_2)_r$-O-CO-$(CH_2)_s$-, -$(CH_2)_r$-NR^1-CO-$(CH_2)_s$-, -$(CH_2)_r$-NR^1-CO-O-$(CH_2)_s$-, and -CO-O-$(CH_2)_r$-O-$(CH_2)_s$-, wherein R^1 is as defined herein above; r and s each represent an integer from 1 to 20; and $r + s \leq 21$. It is more preferred that r and s each represent an integer from 1 to 12. It is especially preferred that $r + s \leq 15$.

35. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22~~to 34~~, wherein S^3 include 1,2-ethylen, 1,3-propylen, 1,4-butylen, 1,5-pentylen, 1,6-hexylen, 1,7-heptylen, 1,8-octylen, 1,9-nonylen, 1,10-decylen, 1,11-undecylen, 1,12-dodecylen, 3-methyl-1,4-butylen, 2-(methylenoxy)ethylen, 3-(methylenoxy)propylen, 4-(methylenoxy)butylen, 5-(methylenoxy)pentylen, 6-(methylenoxy)hexylen, 7-(methylenoxy)heptylen, 8-(methylenoxy)octylen, 9-(methylenoxy)nonylen, 10-(methylenoxy)decylen, 11-(methylenoxy)undecylen, 12-(methylenoxy)dodecylen, 2-(carbonyloxy)ethylen, 3-(carbonyloxy)propylen, 4-(carbonyloxy)butylen, 5-(carbonyloxy)pentylen, 6-(carbonyloxy)hexylen, 7-(carbonyloxy)heptylen, 8-(carbonyloxy)octylen, 9-(carbonyloxy)nonylen, 10-(carbonyloxy)decylen, 11-(carbonyloxy)undecylen, 12-(carbonyloxy)dodecylen, 2-(carbonylamino)ethylen, 3-(carbonylamino)propylen, 4-(carbonylamino)butylen, 5-(carbonylamino)pentylen, 6-(carbonylamino)hexylen, 7-(carbonylamino)heptylen, 8-(carbonylamino)octylen, 9-(carbonylamino)nonylen, 10-(carbonylamino)decylen, 11-(carbonylamino)undecylen, 12-(carbonylamino)dodecylen, 6-(3-propylenaminocarbonyloxy)hexylen, 6-(3-propylenoxy)hexylen, 6-(3-propylenaminocarbonyl)hexyl, 2-(methylenoxycarbonyl)ethylen, 6-(3-propylenoxycarbonyloxy)hexylen, 6-(3-propylenoxycarbonyl)hexylen, 2-(methylenaminocarbonyl)ethylen, 3-(methylenaminocarbonyl)propylen, 6-(methylenaminocarbonyl)hexylen, 6-(3-propylenaminocarbonyloxy)hexylen, 6-(3-propylenaminocarbonyl)hexylen , 4-{[6-(methylenoxy)hexyl]oxy}phenylen, 4-[6-(methylenoxy)hexyl]cyclohexylen, 3-methoxy-4-{[6-(methylenoxy)hexyl]oxy}phenylen, 4-[3-(carbonyloxy)propyl]phenylen, 4-

[6-(carbonyloxy)hexyl]phenylen, 4-[6-(carbonyloxy)hexyl]cyclohexylen, 3-methoxy-4-[6-(carbonyloxy)hexyl]phenylen and the like.

36. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 ~~to~~ ~~35~~, wherein Q is an oxygen atom or -NH-.

37. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22~~to~~ ~~36~~, wherein Q is an oxygen atom.

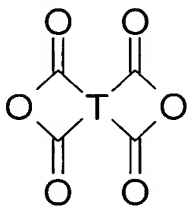
38. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22~~to~~ ~~37~~, wherein X and Y represent hydrogen.

39. (currently amended): Diamine compounds according to ~~anyone of~~ claims 22 ~~to~~ ~~37~~, wherein the photoactive groups are groups of formula IIIa.

40. (currently amended): Use of a diamine compound according to ~~anyone of~~ claims 22~~to 39~~ as precursor for the production of liquid crystal alignment layers.

41. (original): A liquid crystal orientation material obtained by the reaction of a diamine compound of general formula I.

42. (original): A polymer from the class of polyamic acids, polyamic acid esters or polyimides obtained by the reaction of a diamine compound of general formula I with one or more tetracarboxylic acid anhydride of general formula IV:



IV

wherein T represents a tetravalent organic radical.

43. (original): A polymer according to claim 42 obtained by the reaction of a diamine compound of general formula I and one or more additional diamines with one or more tetracarboxylic acid anhydride of general formula IV

44. (currently amended): A polymer according to claims 42 ~~or 43~~, wherein T is derived from an aliphatic, alicyclic or aromatic tetracarboxylic acid dianhydride.

45. (original): A polymer according to claim 44, wherein the aliphatic or alicyclic tetracarboxylic acid dianhydride is 1,1,4,4-butanetetracarboxylic acid dianhydride,
ethylenemaleic acid dianhydride,
1,2,3,4-cyclobutanetetracarboxylic acid dianhydride,
1,2,3,4-cyclopentanetetracarboxylic acid dianhydride,

2,3,5-tricarboxycyclopentylacetic acid dianhydride,

3,5,6-tricarboxynorbornylacetic acid dianhydride,

2,3,4,5-tetrahydrofurantetracarboxylic acid dianhydride,

rel-[1S,5R,6R]-3-oxabicyclo[3.2.1]octane-2,4-dione-6-spiro-3'-(tetrahydrofuran2',5'-dione),

4-(2,5-dioxotetrahydrofuran-3-yl)tetrahydronaphthalene-1,2-dicarboxylic acid dianhydride,

5-(2,5-dioxotetrahydrofuran-3-yl)-3-methyl-3-cyclohexene-1,2-dicarboxylic acid dianhydride,

bicyclo[2.2.2]oct-7-ene-2,3,5,6-tetracarboxylic acid dianhydride,

bicyclo[2.2.2]octane-2,3,5,6-tetracarboxylic acid dianhydride,

1,8-dimethylbicyclo[2.2.2]oct-7-ene-2,3,5,6-tetracarboxylic acid dianhydride

and the like.

46. (currently amended): A polymer according to claims 44 ~~or 45~~, wherein the aromatic tetracarboxylic acid dianhydride is pyromellitic acid dianhydride,

3,3',4,4'-benzophenonetetracarboxylic acid dianhydride,

4,4'-oxydiphthalic acid dianhydride,

3,3',4,4'-diphenylsulfonetetracarboxylic acid dianhydride,

1,4,5,8-naphthalenetetracarboxylic acid dianhydride,

2,3,6,7-naphthalenetetracarboxylic acid dianhydride,

3,3',4,4'-dimethyldiphenylsilanetetracarboxylic acid dianhydride,

3,3',4,4'-tetraphenylsilanetetracarboxylic acid dianhydride,

1,2,3,4-furantetracarboxylic acid dianhydride,

4,4'-bis(3,4-dicarboxyphenoxy)diphenyl sulfide dianhydride,

4,4'-bis(3,4-dicarboxyphenoxy)diphenyl sulfone dianhydride,

4,4'-bis(3,4-dicarboxyphenoxy)diphenylpropane dianhydride,

3,3',4,4'-biphenyltetracarboxylic acid dianhydride,

ethylene glycol bis(trimellitic acid) dianhydride,

4,4'-(1,4-phenylene)bis(phthalic acid) dianhydride,

4,4'-(1,3-phenylene)bis(phthalic acid) dianhydride,

4,4'-(hexafluoroisopropylidene)diphthalic acid dianhydride,

4,4'-oxydi(1,4-phenylene)bis(phthalic acid) dianhydride,

4,4'-methylenedi(1,4-phenylene)bis(phthalic acid) dianhydride

and the like.

47. (currently amended): A polymer according to ~~anyone of~~ claims 44 ~~to 46~~, wherein the tetracarboxylic acid dianhydrides are 1,2,3,4-cyclobutanetetracarboxylic acid dianhydride,

1,2,3,4-cyclopentanetetracarboxylic acid dianhydride,

2,3,5-tricarboxycyclopentylacetic acid dianhydride,

5-(2,5-dioxotetrahydrofuran-3-yl)-3-methyl-3-cyclohexene-1,2-dicarboxylic acid dianhydride,

4-(2,5-dioxotetrahydrofuran-3-yl)tetrahydronaphthalene-1,2-dicarboxylic acid dianhydride,

4,4'-(hexafluoroisopropylidene)diphthalic acid dianhydride and

bicyclo[2.2.2]oct-7-ene-2,3,5,6-tetracarboxylic acid dianhydride.

48. (currently amended): A polymer according to ~~anyone of~~ claims 43 ~~to 47~~, wherein the additional diamine is ethylenediamine, 1,3-propylenediamine, 1,4-butylenediamine,

1,5-pentylenediamine, 1,6-hexylenediamine, 1,7-heptylenediamine, 1,8-octylenediamine,

1,9-nonylenediamine, 1,10-decylenediamine, 1,11-undecylenediamine, 1,12-dodecylenediamine,

α,α'-diamino-*m*-xylene, α,α'-diamino-*p*-xylene,

(5-amino2,2,4-trimethylcyclopentyl)methylamine, 1,2-diaminocyclohexane,

4,4'-diaminodicyclohexylmethane, 1,3-bis(methylamino)cyclohexane,

4,9-dioxadodecane-1,12-diamine, 3,5-diaminobenzoic acid methyl ester,

3,5-diaminobenzoic acid hexyl ester, 3,5-diaminobenzoic acid dodecyl ester,

3,5-diaminobenzoic acid isopropyl ester, 4,4'-methylenedianiline, 4,4'-ethylenedianiline,

4,4'-diamino-3,3'-dimethyldiphenylmethane, 3,3',5,5'-tetramethylbenzidine,

4,4'-diaminodiphenyl sulfone, 4,4'-diaminodiphenyl ether, 1,5-diaminonaphthalene,

3,3'-dimethyl-4,4'-diaminobiphenyl, 3,4'-diaminodiphenyl ether, 3,3'-diaminobenzophenone,

4,4'-diaminobenzophenone, 4,4'-diamino-2,2'-dimethylbibenzyl,

bis[4-(4-aminophenoxy)phenyl] sulfone, 1,4-bis(4-aminophenoxy)benzene,

1,3-bis(4-aminophenoxy)benzene, 1,3-bis(3-aminophenoxy)benzene, 2,7-diaminofluorene,

9,9-bis(4-aminophenyl)fluorene, 4,4'-methylenebis(2-chloroaniline),

4,4'-bis(4-aminophenoxy)biphenyl, 2,2',5,5'-tetrachloro-4,4'-diaminobiphenyl,

2,2'-dichloro-4,4'-diamino-5,5'-dimethoxybiphenyl, 3,3'-dimethoxy-4,4'-diaminobiphenyl,

4,4'-(1,4-phenyleneisopropylidene)bisaniline, 4,4'-(1,3-phenyleneisopropylidene)bisaniline,

2,2-bis[4-(4-aminophenoxy)phenyl]propane,

2,2-bis[3-(4-aminophenoxy)phenyl]hexafluoropropane,

2,2-bis[3-amino-4-methylphenyl]hexafluoropropane, 2,2-bis(4-aminophenyl)hexafluoropropane,

2,2'-bis[4-(4-amino-2-trifluoromethylphenoxy)phenyl]hexafluoropropane,

4,4'-diamino-2,2'-bis(trifluoromethyl)biphenyl, and

4,4'-bis[(4-amino-2-trifluoromethyl)phenoxy]-2,3,5,6,2',3',5',6'-octafluorobiphenyl.

49. (currently amended): A polymer according to ~~anyone of~~ claims 42 ~~to 48~~, wherein the polymer comprise as side-chains a photoreactive group that can be photoisomerized and/or photodimerized on exposure to UV or laser light.

50. (currently amended): A polymer according to ~~anyone of~~ claims 42 ~~to 49~~, wherein at least 75 % of repeating units include a side chain with a photoreactive group.

51. (currently amended): A polymer according to ~~anyone of~~ claims 42 ~~to 50~~ having an intrinsic viscosity in the range of 0.05 to 10 dL/g.

52. (currently amended): A polymer according to ~~anyone of~~ claims 42 ~~to 51~~ having an intrinsic viscosity in the range of 0.05 to 5 dL/g.

53. (currently amended): A polymer according to ~~anyone of~~ claims 42 ~~to 52~~ comprising from 2 to 2000 repeating units.

54. (currently amended): A polymer according to ~~anyone of~~ claims 42 ~~to 53~~ comprising from 3 to 200 repeating units.

55. (currently amended): A polymer according to ~~anyone of~~ claims 42 ~~to 54~~ further comprising additives such as silane-containing compounds and epoxy-containing crosslinking agents.

56. (original): A polymer according to claim 55, wherein the epoxy-containing crosslinking agents include 4,4'-methylene-bis-(*N*,*N*-diglycidylaniline), trimethylolpropane triglycidyl ether, benzene-1,2,4,5-tetracarboxylic acid 1,2:4,5-*N*,*N'*-diglycidyldiimide, polyethylene glycol diglycidyl ether, *N*,*N*-diglycidylcyclohexylamine and the like.

57. (currently amended): A polymer according to ~~anyone of~~ claims 42 ~~to 56~~ further comprising additional additives such as a photosensitizer, a photoradical generator and/or a cationic photoinitiator.

58. (original): A polymer according to claim 57, wherein the additional additive includes 2,2-dimethoxyphenylethanone, a mixture of diphenylmethanone and *N*,*N*-dimethylbenzenamine or ethyl 4-(dimethylamino)benzoate, xanthone, thioxanthone, Irgacure™ 184, 369, 500, 651 and 907 (Ciba), Michler's ketone, and triaryl sulfonium salt.

59. (currently amended): A polymer layer comprising a polymer according to ~~anyone of~~ claims 42 ~~to 58~~ in a crosslinked form.

60. (original): A polymer layer according to claim 59 as orientation layers for liquid crystals.

61. (currently amended): A polymer layer according to claims 59 ~~or 60~~ further comprising other polymers, oligomers, monomers, photoactive polymers, photoactive oligomers and/or photoactive monomers

62. (currently amended): Use of a polymer layer according to claims 60 ~~or 61~~ in the manufacture of optical constructional elements, preferably in the production of hybrid layer elements.

63. (currently amended): Method of preparing a polymer layer according to ~~anyone of~~ claims 59 ~~to 61~~ by applying one or more polymers according to claims 42 ~~to 58~~ to a support and, after any optional imidisation step, crosslinking the polymer or polymer mixture by irradiation with linearly polarized light.

64. (currently amended): Polymer layers according to claims 42 ~~to 58~~ having a thickness of 0.05 to 50 μm.

65. (currently amended): Use of polymer layers according to ~~anyone of~~ claims 59 ~~to 61~~ in the production of optical or electro-optical devices as well as unstructured and structured optical elements and multi-layer systems.

66. (currently amended): Optical or electro-optical device comprising one or more polymers according to ~~anyone of~~ claims 42 ~~to 58~~ in crosslinked form.

67. (original): Electro-optical devices according to claim 66 comoprising more than one layer.